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**UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF CALIFORNIA
OAKLAND DIVISION**

CELGARD, LLC,

Plaintiff,

v.

SHENZHEN SENIOR TECHNOLOGY
MATERIAL CO. LTD. (US) RESEARCH
INSTITUTE, SHENZHEN SENIOR
TECHNOLOGY MATERIAL CO. LTD.,
SUN TOWN TECHNOLOGY, INC.,
FARASIS ENERGY USA, INC.,
FARASIS ENERGY, INC., FARASIS
ENERGY (GAN ZHOU), INC., FARASIS
ENERGY (GAN ZHOU) CO., LTD.,
GLOBAL VENTURE DEVELOPMENT,
LLC, AND GLOBAL VENTURE
DEVELOPMENT, INC.,

Defendants.

Case No. 4:19-cv-05784-JST

**CELGARD'S REPLY IN SUPPORT OF ITS
MOTION FOR A PRELIMINARY
INJUNCTION**

[REDACTED VERSION]

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INTRODUCTION

Senior's opposition to Celgard's preliminary injunction motion is a complete fiction—replete with misrepresentations, omissions, and inaccuracies. Senior *admits* it hired Dr. Steven Zhang as CTO in 2017 and [REDACTED], which delayed this suit for years and resulted in immeasurable harm to Celgard. While Senior was hiding Dr. Zhang, Senior greatly improved the performance of its separators, added new separators, stole Celgard's customers, dramatically increased its sales of and capacity for producing infringing and unlawful separators, and began eroding separator prices—all of which has and continues to significantly and irreparably harm Celgard. Senior's deceptive conduct also robbed Celgard of the opportunity to negate harm and fairly compete in the market.

Due to Senior's deceptive conduct, as well as Dr. Zhang misrepresenting to Celgard that he was leaving Celgard for General Electric ("GE"), Celgard did not locate Dr. Zhang until early 2019—not May 2018, as Senior erroneously asserts. In fact, because [REDACTED] Dr. Zhang to change his name, when Celgard's President attended a trade show in May 2018, Senior personnel said no one named Dr. Zhang worked at Senior. It was not until Dr. Zhang called Celgard's President in early 2019 that Celgard suspected Dr. Zhang worked at Senior, but even during that call, Dr. Zhang tried to convince Celgard that he did not work for Senior.

Senior has pointed to nothing that negates the irreparable harm to Celgard, and Senior improperly mistakes Celgard's diligence in filing this suit for delay. Celgard learned in January 2019 that Senior had stolen Celgard's customer, Farasis—where Senior agreed to supply its separators to Farasis at dumping prices. Celgard thereafter promptly sent a letter to Senior in February 2019 detailing Senior's infringement and trade secret misappropriation, for which Celgard never received a formal response. Celgard continued to evaluate diligently the extent of Senior's illegal conduct and the irreparable harm caused by such conduct. Also during that same time, Celgard was already in patent litigation with first MTI, then with Targray—Senior's exclusive U.S. distributor. Under these circumstances, there was no unreasonable delay.

Senior's rebuttal to Celgard's allegations of trade secret misappropriation fares no better. First, despite having access to its own data, Senior fails to advance any evidence showing that it

independently developed Celgard's trade secrets or confidential information. Instead, Senior provides a single datasheet [REDACTED]—prior to Dr. Zhang's arrival—that shows pilot scale numbers, not mass-production numbers. As Celgard's Dr. Wensley explains, comparing pilot scale numbers [REDACTED] to 2018 mass-production numbers is inapt and misleading. Second, Senior's declarations broadly allege that it produced its separators before Dr. Zhang joined Senior, but fail to provide any specificity as to what was produced or whether specific properties were thereafter optimized. Indeed, that Farasis, for example, did not contract with Senior until 2019, standing alone, undermines Senior's claim that its separators' properties were optimized in [REDACTED].

Senior's rebuttal to Celgard's patent infringement allegations are equally without merit. Senior fails to apply proper claim constructions, improperly reads limitations into the claims, and fails to rebut Celgard's infringement and doctrine of equivalents ("DOE") arguments, all while recycling arguments that have been rejected previously by another court and the U.S. Patent and Trademark Office ("PTO").

Further, this Court should not credit Senior's protests that an injunction will somehow "crush" Senior's business and damage battery manufacturers. While the magnitude of the irreparable harm to Celgard is substantial, Senior should not profit in any way from its accused separators, and Celgard can readily replace the accused separators being supplied by Senior precisely because Senior's separators are based on Celgard's patented technology, trade secrets and confidential information. Accordingly, this Court should grant Celgard's Motion for a Preliminary Injunction.

ARGUMENT

I. SENIOR FAILED TO REBUT CELGARD'S SHOWING OF IRREPARABLE HARM.

A. Celgard Did Not Unreasonably Delay in Filing its Motion.

Senior's primary argument that Celgard allegedly delayed seeking injunctive relief for over "fifteen months after learning of Dr. Zhang's employment with Senior" in May 2018 is a falsehood. Opp. at 17. When Dr. Zhang left Celgard in October 2016, he said he was going to GE. Shi Decl. ¶¶ 3-5, 10. Instead, he went to work for Senior and, as Senior admits, [REDACTED]. In May 2018, Celgard's

1 President, Lie Shi, asked Senior employees at a trade show *if* Dr. Zhang worked at Senior, after
 2 learning that he never worked at GE. *Id.* ¶¶ 10-13. Senior lied, stating that no one with that name
 3 worked at Senior. *Id.* Mr. Shi did not speak to Dr. Zhang until around early 2019, when Dr. Zhang
 4 called Mr. Shi, and even on that call, Dr. Zhang said he was not technically working for Senior and
 5 that he was not working on separator-related technology. *Id.* ¶ 14. Accordingly, Senior is wrong
 6 that Celgard knew of Dr. Zhang’s employment at Senior since May 2018 and that Celgard delayed
 7 its suit since that time.

8 Senior also is wrong that there was any unreasonable delay between the time that Celgard
 9 sent Senior a letter detailing Senior’s illegal conduct (February 2019) and when Celgard filed suit
 10 (September 2019). Celgard learned in late January 2019 that Senior stole Celgard’s customer,
 11 Farasis, causing Farasis to breach its contract with Celgard and entered into a supply agreement of
 12 its own. *Id.* ¶ 15. Celgard immediately evaluated the scope of harm from that agreement, continued
 13 to negotiate with Farasis to keep its contract and mitigate any harm, evaluated where to file a
 14 lawsuit, investigated Senior’s activities and prepared for suit. *Id.* ¶¶ 16-18. Further, Celgard was
 15 engaged in other patent litigation over the patents-in-suit—first with MTI, which ended in May
 16 2019, and then with Targray—Senior’s alleged exclusive U.S. distributor of its separators. *Id.*
 17 ¶¶ 19-20. Celgard continued to gather information about Senior until the Targray suit ended in
 18 August 2019. *Id.* Such diligence by Celgard was reasonable and in no way negates irreparable harm.
 19 *See Arc of Cal. v. Douglas*, 757 F.3d 975, 990-91 (9th Cir. 2014) (holding “courts are loath to
 20 withhold relief solely on [delay]”); *Advanced Commun. Design, Inc. v. Premier Retail Networks,*
 21 *Inc.*, 46 F. App’x 964, 984 (Fed. Cir. 2002) (when “the movant has offered a good explanation for
 22 that delay,” no unreasonable delay exists); *Cybermedia, Inc. v. Symantec Corp.*, 19 F. Supp. 2d
 23 1070, 1078 (N.D. Cal. 1998) (6-month delay reasonable due to “reasonable investigation of
 24 [plaintiff’s] claims,” engaging counsel, and filing suit.); *Rosen Entm’t Sys v. Icon Enters*, 359 F.
 25 Supp. 2d 902, 910-11 (C.D. Cal. 2005) (17-month delay reasonable due to ongoing suits against
 26 other infringers).

27 Further, the seven weeks between when Celgard filed suit and its preliminary injunction
 28 motion were *solely* caused by Senior evasively avoiding service so that Celgard could not file its

preliminary injunction motion sooner. Dkt. No. 36. This time should be discounted entirely. Accordingly, there has been no unreasonable delay and any previous activity preparing for suit in no way “mean[s] that [Celgard] does not now have a *present* interest in expeditiously litigating this case.” *Genentech, Inc. v. JHL Biotech, Inc.*, No. C 18-06582 WHA, 2019 U.S. Dist. LEXIS 36140, at *72 (N.D. Cal., Mar. 5, 2019).¹

B. Senior Failed to Discount Celgard’s Ample Evidence of Irreparable Harm.

Senior incorrectly asserts that Celgard has provided no evidence of irreparable harm. Opp. at 18. Senior is wrong. First, contrary to Senior’s assertions, Senior’s recent theft of Celgard’s customer, Farasis, and the resulting [REDACTED] is evidence of irreparable harm.² McCallum Decl. ¶¶ 20, 25. Second, Senior is wrong that a Senior sale is not a lost Celgard sale. Senior’s argument is premised on Senior and Celgard each holding 8% of the *entire* separator market, but Celgard and Senior primarily supply dry type separators—a distinct market. *Id.* ¶¶ 19-32. Indeed, the majority of Senior’s accused products are dry type separators. *Id.* The dry type separator market has only three major suppliers—Senior, Celgard and UBE—with Senior and Celgard having far more of the market than UBE. *Id.* Thus, in this relevant market, a sale to Senior is indeed a lost sale to Celgard, and Senior’s recent theft of Celgard’s customer, Farasis, will inevitably and irreparably change Celgard’s market share in dry type separators.³ *Id.*

Third, Senior’s argument that there is no evidence of price erosion is legally and factually

¹ Senior relies on cases that are not analogous or supportive—cases in which parties either waited substantially longer than Celgard in seeking injunctive relief, parties offered no “good explanation” for the delay, or the Court considered dispositive facts beyond delay. Opp. at 17, fn 10. *See e.g., High Tech Med. Instrumentation, Inc. v. New Image Indus., Inc.*, 49 F.3d 1551, 1557 (Fed. Cir. 1995) (denying injunction where plaintiff offered no “good explanation” as to delay, in addition to other facts); *Ojmar US, LLC v. Sec. People, Inc.*, No. 16-cv-04948-HSG, 2017 U.S. Dist. LEXIS 105444, at *10 (N.D. Cal. July 7, 2017) (same); *Lilith Games (Shanghai) Co. v. uCool, Inc.*, No. 15-CV-01267-SC, 2015 U.S. Dist. LEXIS 128619, at *32 (N.D. Cal. Sept. 23, 2015) (denying injunction where plaintiff was a “relative newcomer” to the accused infringers market, and had not “expended great energy, time, and money” in development before delaying in seeking injunctive relief).

² It is irrelevant that the contract was with [REDACTED]. Celgard also had a contract with [REDACTED] for the supply of separators, and [REDACTED] customers, such as Zero Motorcycles, produce products that are sold in the U.S. Dkt. No. 95, ¶ 44.

³ Senior further argues that Celgard cannot be losing sales from Senior’s sales to its customers because Senior has a longstanding relationship with them. Opp. at 18, fn 12. However, Senior fails to provide any specificity regarding these relationships, including the type of products sold to these customers, if any. Further, Senior’s recent contract with Celgard’s customer, Farasis, underscores that a “longstanding relationship” alone is irrelevant to irreparable harm. Wensley Decl. ¶ 28.

1 flawed. Opp. at 19. Senior is wrong legally that Celgard “must introduce evidence that it has
2 actually lowered, or must immediately lower, its prices.” *Id.* The case it cites for support, *Integra*
3 *LifeSciences Corp. v. HyperBranch Med. Tech., Inc.*, No. 15-819-LPS-CJB, 2016 U.S. Dist. LEXIS
4 124152, at *52 (D. Del. Aug. 12, 2016), does not so hold—instead it holds only that the plaintiff
5 failed to provide “real support” for its claim of a threat of price erosion. Senior also is wrong
6 factually. In contrast to *Integra*, Senior’s offers for sale and sales of its accused products at dumping
7 prices to Celgard’s customers are causing customers to ask Celgard for lower than profitable prices
8 and to switch to Senior’s separators—as was the case with Farasis. McCallum Decl. ¶¶ 26, 33-43.
9 This is direct evidence of price erosion and irreparable harm. *D.light design, Inc. v. Boxin Solar*
10 *Co., Ltd.*, 13-cv-05988, 2015 U.S. Dist. LEXIS 161062, at *13 (N.D. Cal. Dec. 1, 2015).

11 Senior ignores these facts, instead focusing on one statement made by one person at
12 Celgard’s **parent company**—Asahi Kasei—during a quarterly call in which he said that currently
13 he does not believe there is a “big collapse in the market place.” Opp. at 19 (Wheeler Decl., Ex. 1
14 at 6). However, Senior omits that during that same call, that person also said that “more recently
15 some of our Chinese competitors are offering customers fairly low prices” and that overall sales
16 volumes of “dry-process separators were reduced by half, year-on year.” *Id.* Further, on that same
17 call, a representative from Citigroup noted that “the risk of price erosion for the separators is
18 emerging.” *Id.*

19 Fourth, Senior is incorrect that Celgard has failed to show harm to its reputation and
20 goodwill because it has not provided evidence that the accused products are inferior to Celgard’s
21 separators. Opp. at 19. However, as confirmed by the case cited for support, such evidence is not
22 required and is only one factor that can be considered for irreparable harm. *Wavetronix LLC v.*
23 *Iteris, Inc.*, No. A-14-CA-970-SS, 2015 U.S. Dist. LEXIS 6993, at *22 (W.D. Tex. Jan. 21, 2015).
24 Nonetheless, Senior has its analysis backwards. Senior has been able to improve its separators
25 because it stole Celgard’s technology, trade secrets and confidential information. The loss of the
26 Farasis contract and the loss of the ability to gain new customers and to expand goodwill is precisely
27 “the type of harm which the Court must prevent” through injunctive relief. *ActiveVideo Networks*,
28

1 *Inc. v. Verizon Commc'ns, Inc.*, 827 F.Supp.2d 641, 649 (E.D. Va. 2011).⁴

2 **C. Senior Failed to Rebut that Monetary Damages are Inadequate.**

3 Senior's argument that Celgard has numerous licensing activities that negate irreparable
4 harm also is a fiction.⁵ Opp. at 20. To the contrary, Celgard does [REDACTED] and
5 certainly has not done so with Senior.⁶ Shi Decl. ¶ 21. Indeed, the prior two agreements that
6 resolved patent infringement for the patents-in-suit—MTI and Targray—[REDACTED]
7 [REDACTED] and both companies agreed to an injunction. *Id.*; Vogel Decl. Exs. A, B. Further, the
8 agreement with [REDACTED]
9 [REDACTED]. Shi Decl. ¶ 21; Vogel Decl. Ex. C. Also, Celgard's prior case against
10 LG Chem and the resulting agreement does not support Senior. In that case, unlike here, LG Chem
11 had a preexisting license and business relationship with Celgard. *Celgard, LLC v. LG Chem, Ltd.*,
12 624 F. App'x 748, 753 (Fed. Cir. 2015). Accordingly, Celgard's handful of agreements are entirely
13 irrelevant to this case. They all were made in the context of resolving patent litigation for the '520
14 patent, and, importantly, not one involved trade secret misappropriation. *See Broadcom Corp. v.*
15 *Emulex Corp.*, No. SACV 09-1058 JVS (ANx), 2012 U.S. Dist. LEXIS 129524, at *13 (C.D. Cal.
16 Mar. 16, 2012) (rejecting argument that past licensing practices mean monetary damages is
17 sufficient and noting that they were cross-licenses for resolving litigation); *see also Young v.*
18 *Lumenis, Inc.*, 301 F. Supp. 2d 765, 772-73 (S.D. Ohio 2004) (holding that licensing activities do
19 not bar a finding of irreparable harm).

20 **D. A Causal Nexus Exists Between the Irreparable Harm and Senior's Conduct.**

21 Senior asserts incorrectly that there is no link between Celgard's irreparable harm and

22
23 ⁴ Senior is also incorrect that the Supreme Court rejected harm from "loss of the right to exclude." Opp. at
24 20. The Federal Circuit in *Robert* noted that even though "the Supreme Court disapproved of this court's
absolute reliance on the patentee's right to exclude . . . *that does not mean that the nature of patent rights*
has no place in the appropriate equitable analysis." *Id.*

25 ⁵ Senior's argument that because Celgard has not yet provided Senior with all its past agreements, the Court
26 should infer that monetary damages are adequate, is meritless. Opp. at 20, fn.15. These agreements require
27 third-party consent prior to disclosure, and Celgard has been diligently accommodating Senior's untimely
demand that Celgard produce the agreements by promptly seeking third-party consent, despite discovery
not being open, and Senior's failure to seek leave of Court to obtain such discovery. In any event, as
discussed herein, such agreements are irrelevant to any assessment of irreparable harm.

28 ⁶ Further, that Celgard indicated to Senior that it "*may be* willing to discuss *supply and* license opportunities"
with Senior does not counsel otherwise. Opp. at 20.

II. SENIOR FAILED TO REBUT LIKELIHOOD OF SUCCESS ON THE MERITS.

Senior *admits* it hired Dr. Steven Zhang as CTO in 2017 and Senior *admits* it [REDACTED]. Shi Decl. ¶¶ 8-9. Even so, Senior's rebuttal to Celgard's trade secret allegations is that Senior allegedly independently developed the accused separators prior to hiring Dr. Zhang. Opp. at 6. But the evidence it cites as

⁸ Senior alleges that Senior-US has no relevance to Celgard's allegations. Opp. at 4. Not so, as will be further explained in Celgard's forthcoming opposition to Senior-China's motion to dismiss. For example, as shown in Senior-US's financial statements, produced in response to the joint stipulation to stop dissolution and transfer of its assets, Senior-US has been funneling [REDACTED] [REDACTED] Vogel Decl., Ex. D. Accordingly, Senior-US has been conducting its operations through these entities.

support is wholly deficient and irrelevant, and Senior fails to provide any relevant evidence for its position. For example, despite having access to such evidence, Senior's Mr. Gao fails to provide any specificity as to dry separator properties at the time they were allegedly introduced in [REDACTED] or allegedly improved in [REDACTED]. Wensley Decl. ¶ 4-5. Further, Mr. Gao does not provide any specificity as to any of the separator properties of Senior-China's [REDACTED] alleged commercial ceramic coated separators, and whether Senior-China mass-produced these separators or only manufactured pilot scale quantity as proof of concept. *Id.* ¶ 6. Further, Senior's Dr. Xiang fails to provide any specificity of the process or materials to substantiate allegations that he, along with Senior, allegedly independently discovered how to optimize thermal shrinkage. *Id.* ¶¶ 3-17. These deficiencies as well as the ones noted below, and others set forth in Dr. Wensley's declaration, are fatal to Senior's allegation that it independently developed its separators. *Id.* ¶¶ 3-17.⁹

1. The Different Processes Have No Bearing on Trade Secret Misappropriation.

Senior alleges that because its [REDACTED] is distinct from Celgard's [REDACTED] process, this supports its independent discovery assertion. Opp. at 7. This is a red herring. As Dr. Wensley explains, even though Senior uses [REDACTED], this does not preclude Senior from using Celgard's trade secrets to influence how parameters such as [REDACTED] are improved or optimized. Wensley Decl. ¶¶ 18-22. It is Celgard's trade secret stretching process—not the "[REDACTED]" process—that largely [REDACTED].¹⁰ *Id.* ¶ 21. Indeed, many of Celgard's trade secrets involve reducing [REDACTED], and Dr. Zhang was involved in [REDACTED] optimization while at Celgard. Shi Decl. ¶¶ 5, 6. Also, because of the complexity and difficulty of optimizing MD/TD shrinkage values for dry type separators, particularly for mass-production separators, it is highly unlikely for Senior to have independently discovered how to optimize these values within such a short amount of time without the assistance of Dr. Zhang. *Id.* Senior has failed to provide any credible evidence to the contrary.

⁹ Senior also contends incorrectly that Celgard relies on the inevitable disclosure doctrine as Celgard is allegedly "bereft of any evidence" that Senior has stolen and used Celgard's trade secrets. Opp. at 7. Yet, Celgard has shown that at least two particular properties of Senior's separators—[REDACTED]—were optimized after Dr. Zhang joined Senior. Further, Senior does not dispute that after hiring Dr. Zhang, Senior introduced at least 20 new separators, while increasing its global market share.

¹⁰ Indeed, Celgard has learned that Dr. Zhang was involved in [REDACTED] optimization not only during his time at Celgard, but also while at Senior. Shi Decl. ¶¶ 5-7.

2. Senior Provided no Evidence its Separators were Optimized Before Dr. Zhang Joined Senior.

Senior also asserts that its accused [REDACTED] separator was developed, finalized, and commercialized in [REDACTED]. Opp. at 8. But Senior's support for its argument is one internal lab report [REDACTED] that it contends has the same values as Senior's 2018 datasheet that Celgard provided with its opening brief. Senior's [REDACTED] internal lab report, however, is derived from "*pilot scale*" or "*proof of concept*" numbers, not numbers based on mass-production. Wensley Decl. ¶ 23-26. It is misleading and inapt for Senior to compare "pilot scale"—i.e., experimental numbers—to any values obtained during mass-production, as it is easier to obtain good values in a lab or pilot setting, and much harder to maintain or routinely achieve these values in a mass-production setting. *Id.* ¶ 25. Senior failed to provide mass-production numbers for its [REDACTED]—let alone any other valid or reputable data—to contradict Celgard's previous analysis. Accordingly, Senior's *lab data* cannot rebut the before-Zhang and after-Zhang *mass-production* data Celgard supplied showing Senior's separators dramatically improved after Dr. Zhang's arrival.

B. Senior Failed to Show any Connection Between any Alleged Improvements in its Separators and the Technology at Issue.

Celgard set forth evidence, which Senior does not dispute, that Senior has introduced 20 new separators since hiring Dr. Zhang. Wensley Decl. ¶ 16. Instead, Senior contends generally that it has consistently introduced new separators into the marketplace [REDACTED], and any new separators are the alleged result of Senior's R&D expenditures and numerous scientists. Opp. at 8. Senior, again, fails to provide any evidence that its R&D spending, for example, was related to the technology at issue in this case, specific claims of the asserted patents, or Celgard's trade secrets or confidential information, such as [REDACTED]. Wensley Decl. ¶¶ 3-17. Such conclusory statements without any supporting evidence are deficient and should be rejected. Further, Dr. Zhang was made CTO at Senior in 2017. In order to be made CTO, Dr. Zhang must have brought expertise to Senior that the other scientists did not have or could not provide. Indeed, Dr. Zhang had all of Celgard's trade secrets, know how, etc., which he irrefutably used to the benefit of Senior.

Regardless, Senior's contention that "Celgard does not identify a single document that Dr. Zhang improperly disclosed after he left Celgard" is irrelevant. Opp. at 8. Senior has this information—not Celgard—and Senior failed to cite any evidence that Celgard's trade secrets were not used to further optimize Senior's separators (e.g., through lab testing, pilot production runs, or mass-production), or that such testing or production runs have not influenced its commercial separators (or those currently in development) and/or research and development strategies. Wensley Decl. ¶ 12. As noted above, Senior has not even produced any manufacturing data.

Even Dr. Zhang could only declare that "to the best of his knowledge," Celgard's trade secrets and/or confidential information were not used in any of Senior's separators at issue in this case. Wensley Decl. ¶ 14. Missing from Dr. Zhang's declaration is any statement or suggestion that he did *not* use or disclose Celgard's trade secrets or confidential information to Senior-California or any other related entity, such as Sun Town or Global Venture. *Id.* ¶ 17. Further, Celgard has received additional information that Dr. Zhang has been recently running separator trials in the U.S. to optimize [REDACTED] at the same third-party stretch facility that Celgard uses to run its confidential trials. Shi Decl. ¶ 7. Further, Dr. Zhang has a California address that he worked at for at least five months in 2019, which is the same address as Sun Town and Global Ventures and in the same building as Senior-California. *Id.*

It has taken years, significant financial investment, and the use of scientists, such as Dr. Zhang, with specialized knowledge for Celgard to develop Celgard's trade secrets and confidential information. Wensley Decl. ¶ 13. Dr. Zhang had unencumbered access to this information while working in Celgard's research and development department and gaining expertise and specialized knowledge in separator technology. *Id.* Because of the complexity and difficulty of optimizing [REDACTED], for example, it is highly unlikely for Senior to have independently discovered how to optimize shrinkage values within such a short amount of time, without the assistance of Dr. Zhang and the improper use of Celgard's trade secrets and confidential information. *Id.* Senior has failed to provide any credible evidence to the contrary.¹¹

¹¹ Senior's argument that Celgard's state law claims are preempted is meritless. Opp. at 10. Breach of contract claims (i.e., inducement of breach of contract) and any claim not based on the misappropriation of trade secrets (i.e., intentional interference with prospective economic relations and the Business and

C. Celgard Sufficiently Identified its Trade Secrets.

Senior's assertion that Celgard failed to adequately identify its trade secrets is meritless. Opp. at 5. Tellingly, none of Senior's declarants allege that they had difficulty ascertaining Celgard's trade secrets. "Where, as here, credible experts declare that they are capable of understanding the [trade secret] designation . . . the designation should, as a general rule, be considered adequate" *Phoenix Techs., Ltd. v. DeviceVM, Inc.*, No. 09-4697-EDL, 2010 U.S. Dist. LEXIS 24884, at *12 (N.D. Cal. Mar. 17, 2010) (internal quotation omitted). This should end the inquiry.¹² Senior's argument is based on selective quotes from a *single* paragraph of Celgard's statement, contending that the statement includes "catch-all" terms but omitting Celgard's voluminous specific identifications of proprietary methods and separator designs, such as [REDACTED] [REDACTED]. Dkt. No. 47. Such specific identifications "clearly refer to tangible trade secret material," and Senior's argument should be rejected. *Weride Corp. v. Huang*, 379 F. Supp. 3d 834, 846-47 (N.D. Cal. 2019).

D. Senior Failed to Raise a Substantial Question on Patent Infringement or Validity.

Celgard accuses over 20 Senior separators of patent infringement and provides infringement evidence—through analysis of representative products. Senior responds with conclusory and unsubstantiated assertions that each separator allegedly is designed with different properties. Senior, however, has set forth no evidence that the representative products are not indeed representative, and has otherwise failed to raise any "substantial question" concerning infringement

Professional claim) are not preempted. *See* Cal. Civ. Code §§ 3426.7(a)-(b). Here, these claims each include additional facts to those that form the basis of Celgard's trade secret claims, such as, for example, allegations of stealing and deceiving Celgard's customers, as well as price erosion (Dkt. No. 95 ¶¶ 207, 220, 221, 223) and are therefore not preempted. *See Henry Schein, Inc. v. Cook*, No. 16-cv-03166-JST, 2017 U.S. Dist. LEXIS 29183, at *10 (N.D. Cal. Mar. 1, 2017) (acknowledging that the unfair competition claim relates to trade secrets but finding it "not preempted because it contains several allegations, like deceiving [plaintiff's] customers, that do not necessarily implicate [defendant's] misappropriation of [plaintiff's] trade secrets").

¹² The cases Senior cites are inapposite. For example, as opposed to the plaintiff in *Jobsience, Inc. v. CVPartners, Inc.*, No. C 13-04519 WHA, 2014 U.S. Dist. LEXIS 26371, at *13 (N.D. Cal. Feb. 28, 2014), whose "one paragraph" statement in the complaint on its trade secrets was found to be so broad as to "incorporate everything about its business practices," Celgard has submitted a separate statement identifying only those specific trade secrets that Senior has misappropriated. *Loop AI Labs Inc. v. Gatti*, 195 F. Supp. 3d 1107, 1111 (N.D. Cal. 2016) (explaining that "there is no bright-line rule governing the level of particularity" in identifying trade secrets).

1 or validity.¹³ *Abbott Labs. v. Sandoz, Inc.*, 544 F.3d 1341, 1364 (Fed. Cir. 2008).

2 **1. Claim 12 of the '520 Patent is Infringed.**

3 Senior mistakenly believes that claim 12 “relates to a previous generation of separators for
4 use in lithium metal batteries,” and then erroneously concludes that because the accused separators
5 are for use [REDACTED]
6 [REDACTED].” Opp. at 10. Yet, Senior improperly relies on the '520 patent's
7 description of the *prior art* to limit claim 12, but the patent is not so limited. White Decl. ¶¶ 3-14.
8 Nevertheless, claim 12 covers a separator for an “energy storage system,” which a POSITA would
9 understand is broader than separators for only lithium metal batteries. *Id.* ¶ 4.

10 **a. Senior Failed to Rebut Celgard's DOE Analysis of “Matrix Material.”**

11 Senior attempts to undercut Celgard's DOE analysis by using erroneous claim
12 constructions, misconstruing the law and facts, and omitting critical facts. As an initial matter,
13 Senior's rebuttal is premised on an erroneous construction of “matrix material” as only
14 “continuous.” Abraham Decl. ¶ 93. Such a construction must be rejected because it improperly
15 imports a limitation from the specification into the claim, resorts to extrinsic evidence, and
16 discounts that the '520 patent provides for the “matrix material” to be continuous or discontinuous.
17 White Decl. ¶¶ 24-43; *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1371 (Fed. Cir. 2014).

18 Senior further incorrectly attempts to invoke prosecution history estoppel (“PHE”) to bar
19 DOE—mistakenly believing that Celgard surrendered from the scope of claim 12 [REDACTED]
20 during prosecution based on Tojo.¹⁴ Opp. at 11. But Senior uses a [REDACTED] as its matrix
21 material—[REDACTED]—and Celgard *never* argued that [REDACTED] were not
22 covered by the claims. White Decl. ¶¶ 44-81. Further, neither Senior nor Dr. Abraham have equated
23 the [REDACTED] discussed in Tojo to Senior's [REDACTED]. *Id.* ¶ 65. Additionally, long after the PTO
24 rejected Tojo as a basis for cancelling claim 12, Celgard prosecuted claims, and received allowance,
25 for example, for claim 16, which *expressly claims* [REDACTED]. White Decl. ¶ 66. Therefore, no

26 ¹³ Senior incorrectly contends that Celgard's infringement claims fail for failure to identify “downstream
27 customers” and a direct infringer. Opp. at 14. But Celgard names such consumers in its Amended
28 Complaint, such as Farasis-US and Zero Motorcycles. Dkt. No. 95, ¶¶ 17, 152.

¹⁴ Senior also incorrectly asserts that DOE does not apply because of claim differentiation. This argument
also has no merit, as explained in Dr. White's declaration. White Decl. ¶ 67.

1 “clear and unmistakable surrender” exists for all [REDACTED] and certainly not for [REDACTED].
2 *Amgen Inc. v. Coherus BioSciences, Inc.*, 931 F.3d 1154, 1159 (Fed. Cir. 2019).

3 Moreover, Senior and Dr. Abraham provide no rebuttal to Celgard’s “function-way-result”
4 (“FWR”) test,¹⁵ instead demanding that Celgard must prove “insubstantial differences” of the
5 chemical structures. Opp. at 12. Senior is wrong. *See, e.g., Ajinomoto Co. v. ITC*, 932 F.3d 1342,
6 1356 (Fed. Cir. 2019) (applying the FWR test in a chemical case). Senior has no support for its
7 argument that Celgard must analyze the differences in chemical structures for DOE. Senior’s cited
8 *Mylan* case is inapposite because the claim at issue here is not to a chemical compound, and further,
9 the *Mylan* court specifically stated that the district court could still apply the FWR test. *Mylan*
10 *Institutional LLC v. Aurobindo Pharma Ltd.*, 857 F.3d 858, 869-70 (Fed. Cir. 2017).

11 Nonetheless, Senior and Dr. Abraham completely miss the mark regarding Celgard’s DOE
12 arguments. For example, Dr. Abraham attacks (without outright refuting) Celgard’s argument that
13 Senior’s ceramic composite layer blocks dendrites and the matrix material contributes to blocking
14 dendrite growth. White Decl. ¶¶ 15-23; 35-40. Dr. Abraham’s analysis fundamentally
15 misunderstands the function of the claimed matrix material, which is to **act as a binder** and to
16 **contribute** to the prevention of electronic shorting by preventing dendrite growth. As is clear from
17 claim 12, it is not the matrix material alone that blocks dendrite growth; rather, that function is
18 carried out by the ceramic composite layer, of which the matrix material is only a part. *Id.* ¶ 60.
19 Indeed, it is for this reason that Celgard and Dr. White previously stated that the function includes
20 **contributing to, but not carrying out in entirety**, the prevention of electronic shorting by blocking
21 dendrite growth. *Id.* ¶ 58. By incorrectly assigning blocking dendrites to the matrix material alone,
22 Dr. Abraham fails to comprehend the claim term and therefore fails to rebut DOE. *Id.* His analysis
23 is similarly flawed in the corresponding “way” and “result” analysis. *Id.* ¶¶ 44-81.

24 **b. The “Ceramic Composite Layer” is Not Required to be Nonporous.**

25 Senior incorrectly asserts that the “ceramic composite layer” must be nonporous and that
26 Senior’s products do not infringe because [REDACTED]. Opp. at 13. Senior recycles
27

28 ¹⁵ That Senior admits its matrix material is a [REDACTED], instead of [REDACTED] as Celgard believed,
does not affect Celgard’s opinion that Senior infringes under DOE. White Decl. ¶ 50.

arguments that previously have been rejected as improperly reading limitations from the specification into the claim. *See Celgard v. LG Chem*, No. 3:14-CV-00043-MOC (W.D.N.C.).¹⁶ Senior does not and cannot point to any evidence where claim 12 is limited to a nonporous embodiment. White Decl. ¶¶ 24-34. To the contrary, the specification allows and describes ceramic composite layers or coatings that are both nonporous and porous. *Id.*

c. Senior's Ceramic Layer is "Adapted to at least Block Dendrite Growth."

Senior incorrectly asserts that absent its erroneous construction, which requires the ceramic composite layer to have an impermeable physical barrier that completely blocks dendrite growth, this claim limitation is allegedly indefinite. Senior's argument ignores a POSITA's understanding, particularly that a POSITA knows how to study and observe dendrite growth. White Decl. ¶¶ 35-37. Further, Senior's argument that Celgard has failed to show that Senior's accused products block dendrite growth is wrong. Opp. at 14. As Dr. White testified, Senior's accused separators do indeed block dendrite growth as in claim 12. *Id.* ¶¶ 15-23.

2. Claim 12 of the '520 patent is Valid.

Senior's contention that claim 12 of the '520 patent is invalid (Opp. at 15) ignores that this claim is presumed valid, and has been upheld as valid *four times*. Vogel Decl., Ex. E; Dkt. No. 95-01. Dr. White nevertheless explains why Senior's Chang reference, in combination with Venugopal and Hasegawa, is not substantially different from art previously considered and rejected by the PTO, and does not render claim 12 obvious. White Decl. ¶¶ 82-105. Specifically, Senior fails both to prove motivation to combine these references to arrive at the claimed invention, and it fails to allege that the ceramic composite layer of the combination is "adapted to at least block dendrite growth and to prevent electronic shorting," as required by claim 12. *Id.* ¶¶ 93, 98, 102-105.

3. Claim 17 of '867 Patent is Valid and Infringed.

Notwithstanding that all patents are presumed valid, Senior incorrectly contends that the '867 patent's reference to "CELGARD ® 2300" and "CELGARD ® 2400" invalidate the claims. Opp. at 15. Not so. At the time of filing, these products did not include calcium stearate, and the

¹⁶ Indeed, Senior's current counsel previously represented LG Chem in *Celgard LLC v. LG Chem, Ltd.*, No. 3:14-CV-00043-MOC, in the Western District of North Carolina. LG Chem made similar arguments, which were rejected by the court. This Court should also reject these arguments here.

particular comparative Celgard products listed in the Examples in the tables having calcium stearate were made within one year of the filing date, and therefore cannot invalidate claim 17. Nark Decl. ¶¶ 4-10; Ferebee Decl. ¶¶ 4-15. Moreover, Dr. White explains why Senior's Ito reference fails to disclose the claimed stearate range with sufficient specificity and therefore does not anticipate the '867 patent. *Id.* ¶¶ 106-117. Senior's non-infringement arguments are also flawed. *Id.* Senior relies on a construction of "improved pin removal properties" in the preamble of claim 17 that is wrong, and Senior also failed to rebut Celgard's evidence of metallic stearate in Senior's products. *Id.*

III. BALANCE OF HARDSHIPS AND PUBLIC INTEREST FAVOR AN INJUNCTION.

Senior's assertion that there is no hardship to Celgard is again a falsehood—based on a misrepresentation that Celgard does not practice the asserted claims. Opp. at 22. To the contrary, as Dr. White testifies, Celgard's separators practice both the '520 and '867 patents. White Decl. ¶ 106. Senior further incorrectly says that any injunction would bring core aspects of Senior's business to a halt and would have consequences to downstream customers. Opp. at 22. Not so. Senior should not have been using separators based on Celgard's patented technology or stolen trade secrets or confidential information in the first place. McCallum Decl. ¶¶ 9-18. Further, the industry will not suffer at the consumer level because a customer might only be temporarily delayed while qualifying a compliant supplier, such as Celgard, who could readily replace Senior's separators with its own. *Id.* ¶¶ 3-18. Indeed, consumers benefit from an industry providing a safe and sustainable business environment that rewards continued investment, innovation, and fair competition. *Id.*

IV. CELGARD'S REQUESTED PRELIMINARY INJUNCTION IS NOT OVERBROAD.

Contrary to Senior's assertions, Courts in this circuit have regularly granted the very relief Celgard has requested. *See Genentech, Inc. v. JHL Biotech, Inc.*, No. C 18-06582 WHA, 2019 U.S. Dist. LEXIS 36140, at *62 (N.D. Cal. Mar. 1, 2019); *Waymo LLC v. Uber Techs., Inc.*, No. C 17-00939 WHA, 2017 U.S. Dist. LEXIS 73843, at *42 (N.D. Cal. May 11, 2017).

CONCLUSION

For these reasons and the reasons provided in Celgard's opening brief, this Court should grant Celgard's motion for a preliminary injunction in the form Celgard proposes.

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Dated: January 6, 2020

ROBINS KAPLAN LLP

By: /s/ Bryan J. Vogel
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